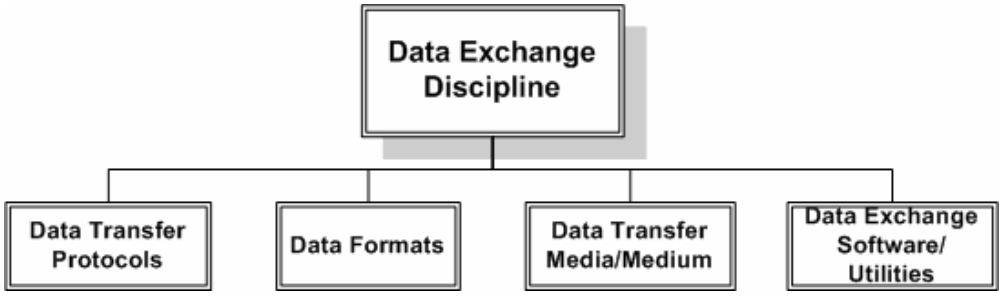
Discipline

DEFINITION	
Name	Data Exchange
Description	The Data Exchange Discipline defines those components and specifications necessary to allow consistent definition, markup, presentation, and exchange of data between government entities and the citizenry. Data exchanges translate data from a sender's system into a specified format; conversely, they also translate the data from the specified format into the receiver's application/system. Data Exchange can be understood in terms of input and output, end-user and application, public and private.
Rationale	There is a growing business need to share data across agencies to provide state services in a more efficient and simplified manner to the citizenry. A data exchange strategy enables the state to retain its investments in existing legacy systems, and provides the foundation for sharing data through common or preferred methods.
Benefits	• Reduced development and information delivery time through the use of common data exchange methods (e.g., common data formats, mediums, and protocols). • Improves the utilization of information resources and avoids unnecessary duplication and incompatibilities in the collection, processing and dissemination of data. • The use of data exchange standards can result in improved reliability of data. • Improved portability of data.

BOUNDARY	
Boundary Limit Statement	The Data Exchange Discipline includes the following preferred areas of data exchange across the Missouri enterprise: o Data Formats – includes composition formats, compression formats and encryption formats. o Data Transfer Media/Medium – includes the physical transport mechanisms used to deliver or receive the data within an exchange. o Data Transfer Protocols - includes the protocols used to transfer or package the 'data stream' within an exchange. o Data Transfer Software/Utilities – includes the tools that ship and or receive batch files between organizations and are necessary for the execution of the data-exchange. [Real-time data-exchange technologies are addressed in the Application Interoperability Discipline.] Together these areas define the methods, tools, or technologies that may be used in the physical or virtual movement of the data from point A to point B.

	The Data Exchange Discipline does not address user data entry or user data retrieval technologies (for example: user query and response). The diagram below illustrates the Technology Areas associated with the Data Exchange Discipline: 
ASSOCIATED ARCHITECTURE LEVEL	
Specify the Domain Name	Interoperability Domain
CRITICAL REFERENCES	
Related Domains/Disciplines	
☐ *Interface – Branding* ☐ *Interface – Access* ☐ *Interface – Accessibility* ☒ *Information – Knowledge Mgt* ☒ *Information – Data Mgt* ☒ *Information – GIT* ☐ *Infrastructure – Network* ☒ *Infrastructure – Platform*	☐ *Interoperability – Data Exchange* ☒ *Interoperability – Application Interop,* ☒ *Application – Application Engineering* ☒ *Application – Electronic Collaboration* ☐ *Systems Mgt – Asset Mgt* ☐ *Systems Mgt – Change Mgt* ☐ *Systems Mgt – Console/Event Mgt* ☐ *Systems Mgt – Help Desk/Problem Mgt*	☐ *Systems Mgt – Business Continuity* ☐ *Security – Managerial Controls* ☒ *Security – Technical Controls* ☐ *Security – Operational Controls* ☐ *Privacy – Profiling* ☐ *Privacy – Personification* ☒ *Privacy – Privacy*
Standards Organizations/Government Bodies	
List Standards Organizations	International Standards Organization (ISO); IEEE Standards for Information Technology
List Government Bodies	
Stakeholders/Roles	
List Stakeholders	Software Engineering, Application Development; Operations
List Roles	Software Developers, Software Architects, DBAs, Technical Support, Console Operators
Discipline-specific Technology Trends	
List Discipline-specific Technology Trends	
Technology Trend Source	
ASSOCIATED COMPLIANCE COMPONENTS	
List Discipline-level Compliance Components	Data Exchange Guidelines

METHODOLOGIES			
List methodologies followed	Reference Models: • TAFIM – Technical Architecture Framework for Information Management [Dept. of Defense, Defense Information Systems Agency] • Federal Enterprise Architecture (FEA) – Technical Reference Model, Service Interface and Integration: Interoperability Area		
DISCIPLINE DOCUMENTATION REQUIREMENTS			
Provide documentation requirements for this Discipline			
ASSOCIATED TECHNOLOGY AREAS			
List the Technology Areas associated with this Discipline	Data Formats; Data Transfer Media/Medium; Data Transfer Protocols; Data Transfer Software/Utilities		
CURRENT STATUS			
Provide the Current Status	☐ *In Development* ☐ *Under Review* ☒ *Approved* ☐ *Rejected*		
AUDIT TRAIL			
Creation Date	11/05/2003	*Date Approved/Rejected*	4/13/04
Reason for Rejection			
Last Date Reviewed		*Last Date Updated*	
Reason for Update			